

### Abstract

A method for packaging a semiconductor device includes the steps of forming a plurality of grooves on an upper 5 surface of a substrate, attaching a heat sink on the substrate, attaching a chip to the substrate by using an adhesive, wire-bonding the substrate and the chip and encapsulating and sealing the substrate and the chip by using an epoxy molding compound. The grooves formed on the 10 substrate enlarges an area where the substrate and the epoxy molding compound attached thereto contact with each other, which improves the operational reliability of the semiconductor device. Further, the heat sink attached to the substrate facilitates a dissipation of heat generated 15 during the operation of the semiconductor device, which prevents failure of the semiconductor device.